**Lab Safety Notes**

Mrs. Krouse, Pre-AP Biology, 2015-2016

For any student or researcher working in a scientific laboratory, it is important to follow particular rules and procedures to prevent injury in the lab. In our biology classroom, we will be following several general safety rules, which are listed below.



1. Listen to or read instructions carefully before attempting to do anything.
2. Wear proper protective gear and clothing.
3. Notify your teacher if any spills or accidents occur.
4. After handling chemicals, always wash your hands with soap and water.
5. During lab work, keep your hands away from your face, and tie back your hair.
6. Know the location of lab safety equipment.
7. Keep your work area uncluttered. Take to the lab station only what is necessary.
8. Never put anything into your mouth during a lab experiment.
9. Clean up your lab area at the conclusion of the laboratory period.

During this class you will be using laboratory supplies such as glassware, chemicals, hot plates, etc. When handling equipment or any other supplies in the laboratory, you must be sure to read the laboratory procedure and listen to any instructions given by the teacher. You must not touch any equipment unless given permission by the teacher. When working with laboratory supplies, you cannot chew gum, eat food, or drink beverages.

With regard to laboratory clothing, you must wear close-toed shoes (as opposed to open-toed shoes like flip flops or sandals). Additionally, you must roll up loose sleeves to prevent them from dragging into any chemical spills on the lab table or knocking over glassware. Avoid wearing sports jerseys in the classroom. Instead of burning like most clothing that comes in contact with an open flame, jersey material will melt at a very high temperature and can stick to your skin causing major burns.

In a more advanced laboratory course like an organic chemistry course, you would be required to wear glasses rather than contact lenses. This rule is in place because chemicals could get trapped between your contact lens and eye. Also, rinsing your eyes out with water to remove chemicals may be less effective when you are wearing contact lenses. Luckily for you, we do not use the types of dangerous chemicals you would use in an upper level chemistry class, so you can still wear your contact lenses. However, all students must wear safety goggles. We will use safety goggles with vents that can be opened to allow air flow. During the actual lab, you will have to close the vents to prevent chemicals splashing through the openings. Occasionally, you will wear lab aprons and gloves to protect your clothing and hands.

All biology, chemistry, and earth science classrooms at Osbourn Park High School have at least three pieces of safety equipment. There is a fire extinguisher located in every classroom and a fire blanket to smother fires on hair and clothing. There is also an eye wash station that can be used to remove harmful chemicals from your eyes. Some classrooms are also equipped with safety showers for major chemical spills. You are NEVER allowed to turn on the eye wash station or safety shower without first telling the teacher.

Students may be responsible for lab equipment that is broken due to negligence. Negligence is defined as “failure to take proper care in doing something.” If you are engaging in horseplay (i.e. messing around) in the laboratory or do not take the time to learn proper procedures before beginning the lab, your behavior may be considered negligent.

When using glassware (ex: beakers, flasks, test tubes) in the laboratory, make sure not to use any glassware that is chipped or cracked. Tell your teacher if you see any broken glassware and she will place it in a special glassware disposal container (not the regular classroom trashcan). This container prevents the custodians from cutting their hands on broken glass that pokes through trash bags.

When using chemicals in the laboratory, never touch, smell, or taste a chemical. If you want to test the odor of a chemical, waft the fumes toward your nose with one hand. Do not put your nose over the container and inhale the fumes.



When handing biological materials in the classroom (i.e. living or once-living organisms), please be respectful. If you are dissecting the specimen, you must have a purpose for the cuts you make (ex: determining the properties of the inside of a frog’s stomach). Always exercise caution when using sharp tools like scalpels or dissecting scissors. Dispose of the biological specimens as directed by your teacher. Typically, we will use a double-lined trash bag to dispose of biological specimens.



When using electrical equipment in the laboratory, be sure that your hands and lab area are dry before plugging in the equipment. Your teacher gave electrocuted herself last year by plugging in a microscope with wet hands. FUN. Never poke anything into electrical outlets. If it is a conductive material, you will get shocked.

When heating chemicals or materials in the laboratory, never reach across an open flame or burner. Use tongs and/or protective gloves when picking up glassware that has been heated on a hot plate or over a burner. Always point the top end of test tubes that are being heated away from people (including yourself). After you are finished, let burners and hotplates cool down before touching them. Test to see if they are cool enough by bringing the back of your hand close to them.

Below are examples of accidents / injuries you may encounter in the laboratory. For each accident / injury, there is a first aid procedure included.

1. Burns - Flush with cold water until burning sensation is lessened.
2. Cuts and Bruises - Do not touch an open wound without safety gloves. Pressing directly on minor cuts will stop bleeding in a few minutes.
3. Substances in the Eye – Flush eyes with plenty of water at the eye wash station for several minutes.
4. Poisoning – Tell your teacher what the substance was IMMEDIATELY.
5. Spills on the Skin – Flush with large quantities of water.